

RFP No.: APSFL/ EnhancementAP FiberPhasel/284/2018, dated 30/05/2018

ENHANCEMENT OF AP FIBER GRID PHASE-I NETWORK

Corrigendum 4, Dt: 02/07/2018

Bidders may please note that this corrigendum document is part of this RFP. The items listed in the corrigendum will supersede the corresponding clauses in RfP

SNo	Section	Clause	Brief Description of the clause	Page No	Revised clause
1	4.Pre-Qualification Criteria	Point 3	The bidder/consortium should have a Cumulative Annual Turnover of INR 100 Crores and above in last three financial years. In case of Consortium the prime bidder should contribute at least 50% of the turnover.	14	The bidder/consortium should have a Cumulative Annual Turnover of INR 80 Crores and above in last three financial years. In case of Consortium the prime bidder should contribute at least 50% of the turnover.
2	6. Technical Bid Evaluation	Point 1	Cumulative Annual Turnover in the last 3 financial yrs. (2015-16, 2016-17, 2017-18 (provisional)) ≥ INR 100 Cr. & ≤ INR 120 Cr. :10 Marks The bidder may submit provisional financials certified by a CA, in case of FY 2017-2018. >INR 120 Cr. & ≤ INR 140 Cr :20 Marks >INR 140 Cr : 25 Marks	17	Cumulative Annual Turnover in the last 3 financial yrs. (2015-16, 2016-17, 2017-18 (provisional)) ≥ INR 80 Cr. & ≤ INR 100 Cr. :10 Marks The bidder may submit provisional financials certified by a CA, in case of FY 2017-2018. >INR 100 Cr. & ≤ INR 120 Cr :20 Marks >INR 120 Cr : 25 Marks
3	8. Annexures	8.11.6 (1)	The appliance should support at least 12 X 10G Gigabit ports and 4 X 100G from Day one	46	The appliance should support at least 12X10G and 8X40G/4X100G ports from Day one
4	8. Annexures	8.10	Revised Price Bid	39	Please refer Annexure A in this corrigendum
5	8. Annexures	8.11.15	Additional Clause: Technical Specifications for IGW Router		Please refer Annexure B in this Corrigendum
6	5. Bill of Materials	5	Revised Bill of materials	16	Please refer Annexure C in this Corrigendum

ANNEXURE A

Price Bid Form:

(To be submitted by Bidder on original letterhead)

To

Date:

The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Subject: RFP for Enhancement of AP Fiber Grid Phase-I Network

Ref. No. APSFL/ EnhancementAP FiberPhasel/284/2018, dated 30/05/2018

S.No	Item description	Unit of Measurement	Quantity (A)	Unit Price (B)	Total Price (A*B)
1.	Supply and installation of 42 U RACK at site as per specification	Nos	140		
2.	Supply and installation of 24 U RACK at site as per specification	Nos	60		
3.	Supply & installation of 5 KVA UPS with 6 hours backup with batteries stand	Nos	125		
4.	Supply & installation of 15 KVA UPS (1+1) with 2 hours backup with batteries rack	Nos	22		
5.	Supply & installation of 3 KVA UPS with 4 hours backup with batteries stand	Nos	75		
6.	Supply, fixing of wall mount 48 port FDMS with required trays and splicing of 24 F ADSS Cables with necessary patch cords	Nos	50		
7.	Supply, fixing of wall mount 24 port FDMS with required trays and splicing of 24 F ADSS Cables with necessary patch cords	Nos	200		
8.	Internal 3Phase/1Phase wiring with proper earthing and Meter box.	Nos	100		
9.	Zonal IPMPLS Node	Nos	60		
10.	CG-NAT	Nos	2		
11.	BNG	Nos	2		
12.	DNS, DHCP & IPAM Servers	Nos	2		
13.	Load Balancer (New)	Nos	1		
14.	Load Balancer (Existing)- Upgrade	Nos	1		
15.	IP Log Management	Nos	1		
16.	*EMS Licenses for BNGs, IPMPLS nodes and CG-NATs	Set	1		
17.	Internet Gateway Routers	Nos	2		
Grand Total Cost					

* In case of non-compatibility with Prime Network EMS, bidder shall provide new EMS for management of the devices supplied. Integration with Prime Network EMS is the responsibility of existing SI of AP Fiber.

Note

- Supply to designated locations in AP /central warehouse within AP as informed by APSFL.
- Unit Rate shall include all duties, levies, insurance, transport and other charges excluding Taxes.
- The Bidder offering the **Lowest Grand Total Cost (Exclusive of Taxes)** will be considered for award of contract.
- If there is a discrepancy between words and figures, the amount in words shall prevail.

APSFL reserves the right to

1. Negotiate with the Bidder whose offer is the lowest (L1) for further reduction of prices.
2. Ask other bidders to match the price of L1 to declare them as the shortlisted bidders and issue the order incase L1 defaults in performance of agreed terms and conditions.
3. Modify, reduce or increase the quantity requirements to an extent of the tendered quantity
4. Change the list of areas of work from time to time based upon the requirement of the purchase.
5. If delivery performance of the Bidder is not as per the Schedule, then APSFL reserves the right to take action against them.
6. APSFL reserves its right to withhold any amount for the deficiency in the service aspect of the ordered items supplied.

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

ANNEXURE B

8.11.15 Inter Gateway Router Specifications:

S. No.	Minimum Technical Specifications
1	Router should have a dedicated data plane Processor, independent of the control plane Processor. The router should have at least 100 Gbps throughput.
2	The router must have redundant power supply and operating systems. Router Must support AC / DC Power supply. There should not be any impact on the router performance in case of one power supply fails. Router should be proposed with AC power supply.
	Router Performance Parameters:
1	Router must have the capability of 6000 vrf instances and at least 4 copies of the Full Internet IPv4 table / 2,500,000 IPv6 routes. Should support at least 50K multicast routes/destinations.
2	The router should support uninterrupted forwarding operation for OSPF, IS-IS routing protocol to ensure high-availability during primary controller card failure.
3	Must support at least 20Gbps of encryption performance built into hardware.
4	The Router shall be designed for continuous operation.
5	Router shall have built in power-on diagnostics system to detect hardware failures.
6	Router shall have suitable Visual Indicators for diagnostics and healthy / unhealthy status of Ports & modules.
	Hardware Detail:
1	Router should have internal redundant hot swappable Power supply.
2	Must have inbuilt Slots / module for minimum 5 * 1 G SFP and 15 * 10 Gig from Day 1.
3	It should be populated with 10 x 10G SFP+ loaded with 6x100m and 2 x10Kms optical modules from day 1.
4	Must support 2 USB ports with 1 No of System Management port
5	Router shall support 19" rack mountings.
6	Router shall support Upgrade of Software through Flash Memory.
7	The router shall support NetFlow / SFlow / Jflow
8	Routers shall be capable of working with 85 – 240 Volts AC
	Software Details:
	The router shall support following protocols from day one:
1	TCP/IP with MTU of 4000 bytes or above on all interfaces.
2	ARP, RARP, ICMPv4 and ICMPv6, DHCP, TFTP and DNS
3	Network address translation (NAT) and Port Address Translation (PAT) supported on all interfaces. NAT and PAT should be performed in hardware.
4	VRRP
5	IPv4 & IPv6 Tunneling on all interfaces.
6	The router should support 3DES and AES encryption standards
7	IPSec implementation should be IETF compliant.
	The router shall support following WAN protocols:
1	PPP
2	Multi-link PPP

3	<p>The router shall support static as well as dynamic routing with support for following IP routing protocols:</p> <ul style="list-style-type: none"> • RIP Version 2 • RIPng • OSPF Version 3. • BGP Version 4. • Multi-Protocol BGP Version 4.
The router shall support following quality of service (QoS) features:	
1	Weighted Fair Queuing (WFQ)
2	IP Precedence i.e. Priority based on TOS field of IPv4 and IPv6.
3	Differentiated Services (Diff Serve) i.e. Priority based on DS Field of the IPv4 and IPv6.
4	The router must be able to implement hierarchical QoS without any compromise in the performance.
The router shall support following Security features as per requirement	
1	Zone Based Firewall features
2	Generic Routing Encapsulation.
3	Access lists based on Network Address, Mask, Protocol Type and Socket Type
4	Access list violation Logging & Accounting
5	MD5 Route Authentication.
6	Controlled SNMP Access through the use of SNMP with MD5 Authentication.
7	Multiple Privilege levels to provide different levels of access. Application Visibility feature should be supported by the Router Hardware.
8	Remote Authentication Dial in User Service (RADIUS).
9	IPv6 uRPF on all interfaces.

ANNEXURE C

Bill of Materials

SNo	Item description	Unit of Measurement	Quantity
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3.	Supply & installation of 5 KVA UPS with 6 hours backup with batteries stand	Nos	125
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5.	Supply & installation of 3 KVA UPS with 4 hours backup with batteries stand	Nos	75
6.	Supply, fixing of wall mount 48 port FDMS with required trays and splicing of 24 F ADSS Cables with necessary patch cords	Nos	50
7.	Supply, fixing of wall mount 24 port FDMS with required trays and splicing of 24 F ADSS Cables with necessary patch cords	Nos	200
8.	Internal 3Phase/1Phase wiring with proper earthing and Meter box.	Nos	100
9.	Zonal IP-MPLS Node	Nos	60
10.	CG-NAT	Nos	2
11.	BNG	Nos	2
12.	DNS, DHCP & IPAM Servers	Nos	2
13.	Load Balancer	Nos	1
14.	Load Balancer Upgrade Card	Nos	1
15.	IP Log Management	Nos	1
16.	*EMS Licenses for BNGs, IPMPLS nodes and CG-NATs	Set	1
17.	Internet Gateway Routers	Nos	2